



E UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Giraldi

Examiner: T. P. Duong

Group Art Unit: 3711

Date: August 5, 2003

Serial No.: 09/844,989

Filed: April 30, 2001

For: GOLF PUTTER HAVING VARIED

STRIKING SURFACE

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APPEAL BRIEF OF APPELLANT

Sir:

The Applicant has filed a timely Notice of Appeal from the action of the Examiner dated December 23, 2002, finally rejecting Claims 1 - 22. The Applicant herein timely files this Brief in accordance with 37 C.F.R. 1.192(a).

I. PARTY IN INTEREST [37 CFR §1.192(c)(1)]

The subject application is not assigned. As such, the Party in Interest is the Applicant.

II. RELATED APPEALS AND INTERFERENCE [37 CFR §1.192(c)(2)]

No other related application is currently subject to an Appeal or Interference.

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III. STATUS OF CLAIMS [37 CFR §1.192(c)(3)]

There are 17 pending claims. Due to a numbering problem in the original application and a subsequent amendment that renumbered the claims, the pending claims are not consecutively numbered.

Claims 1, 2, 4, 5, 7, 8, 10-13, 15-18 and 20-22 are pending in this application.

Claims 1, 2, 4, 5, 7, 8, 10-13, 15-18 and 20-22 stand as finally rejected by the Examiner.

IV. STATUS OF THE AMENDMENTS [37 CFR §1.192(c)(4)]

The amendment filed by the Applicant on December 23, 2002 was entered by the Examiner. No other amendments were filed.

V. SUMMARY OF THE INVENTION [37 CFR §1.192(c)(5)]

The subject application has three pending independent claims, which are Claim 1, Claim 11 and Claim 17.

Claim 1 sets forth a putter head assembly. (See preamble of Claim 1.) The claimed putter head assembly has a putter body (18, Fig. 2) with a toe end, a heel end and a face surface (20, Fig. 2) that extends from the heel end toward the toe end. The face surface (20, Fig. 2) has a loft angle configuration that continuously varies from a positive loft angle to a negative loft angle as the face surface extends between the heel end and the toe end. (See negative loft angle "A" in Fig. 2. See positive loft angle "B" in Fig. 2. See specification, page 8, line 10 – page 9, line 6 for description.)

A non-metallic insert (22, Fig. 2) is disposed in at least a portion of the face surface (20, Fig. 2), wherein said non-metallic insert 22 conforms to the loft angle configuration of said face

surface 20. (See specification, page 13, line 2-10.) The claimed golf club (10, Fig. 1) presents only one distinct striking surface, that happens to have a changing loft angle. The insert (22) acts like a corrective lens and compensates for the curvature of the striking surface. (See specification, page 15, lines 17-20.) The insert (22) therefore helps compensate for the loss of striking face continuity caused by the changing loft angle of the striking face. As such, the present invention golf club is legal under USGA rules. (See specification, page 8, lines 14-16.)

Claim 11 sets forth a putter. (See preamble to Claim 11) The putter has a putter head (18, Fig. 2). The putter head (18, Fig. 2) has a face surface (20, Fig. 2) with loft angle configuration that continuously varies from the toe end of the face surface to the heel end of the face surface. (See negative loft angle "A" in Fig. 2. See positive loft angle "B" in Fig. 2. See specification, page 8, line 10 – page 9, line 6 for description.) Furthermore, a non-metallic insert (22, Fig. 2) is disposed in at least a portion of the face surface (20, Fig. 2), wherein the non-metallic insert (22, Fig. 2) conforms to the loft angle configuration of the face surface. (See specification, page 13, line 2-10.) The insert (22) acts like a corrective lens and compensates for the curvature of the striking surface. (See specification, page 15, lines 17-20.) The insert (22) therefore helps compensate for the loss of striking face continuity caused by the changing loft angle of the striking face.

Claim 17 sets forth a golf club striking surface. (See preamble of Claim 17). The contact face (20, Fig. 3) of the striking surface has a mid-line (See line "M" in Fig. 2) that follows a curved path. (See radius R1 in Fig. 3 and Specification, page 9, lines 7-14.) In addition to being curved, the contact face (20, Fig. 3) of the striking surface has a loft angle configuration that continuously varies between the two opposite ends of the contact face. (See negative loft angle "A" in Fig. 2. See positive loft angle "B" in Fig. 2. See specification, page 8, line 10 – page 9, line 6 for description.) The claimed club striking face also contains a non-metallic insert (22,

Fig. 3) that has thickness along the mid-line ("M", Fig. 2) that varies as a function of position on the mid-line. (See Specification, page 13, line 3 – page 14, line 12.) The insert (22) acts like a corrective lens and compensates for the curvature of the striking surface. (See specification, page 15, lines 17-20.) The insert (22) therefore helps compensate for the loss of striking face continuity caused by the changing loft angle of the striking face.

VI. ISSUES, 137 CFR \$1.192(c)(6)1

The issues presented on review are as follows:

ISSUE 1 - Whether the Examiner erred in rejecting Claims 1-9, 11-14, 16-19 and 22 under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,505,450 to Stuff in view of U.S. Patent No. 5,322,285 to Turner and U.S. Patent No. 5,098,103 to MacKeil

ISSUE 2 - Whether the Examiner erred in finally rejecting Claims 10, 15 and 20-21 under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,505,450 to Stuff in view of U.S. Patent No. 5,322,285 to Turner and U.S. Patent No. 5,098,103 to MacKeil in further view of U.S. Patent No. 5,310,185 to Liollaz and U.S. Patent No. 6,319,150 to Werner.

ISSUE 3 - Whether the Examiner erred in finally rejecting Claims 1 - 22 under 35 U.S.C. §103 because the Examiner has no proper motivation for the combinations made, thereby producing a wrongful hindsight reconstruction.

VII. GROUPING OF CLAIMS, [37 CFR §1.192(c)(7)]

The present application contains three independent claims, which are Claims 1, 11 and 17. Claim 1 sets forth a putter head. Claim 6 sets forth a putter, and Claim 17 a striking surface for any golf club. Since the three independent claims claim different applications of the present

invention, the three independent claims will be argued separately. Accordingly, it is believed that the three independent claims should be considered separately and should not stand and fall together.

VIII. ARGUMENTS. [37 CFR §1.192(c)(7)]

Whether the Examiner erred in rejecting Claims 1-9, 11-14, 16-19 and 22 under 35 USC 103(a) as being unpatentable over U.S. Patent No. 5,505,450 to Stuff in view of U.S. Patent No. 5,322,285 to Turner and U.S. Patent No. 5,098,103 to MacKeil

The rejected claims contain three independent claims. These claims are Claim 1, Claim 11 and Claim 17. Both of these claims are fully distinguishable over the combined references, as is explained below.

Claim 1

Claim 1 sets forth a putter head assembly. The assembly has a putter body with a toe end, a heel end and a face surface that extends from the heel end toward the toe end. The face surface has a loft angle configuration that continuously varies from a positive loft angle to a negative loft angle as the face surface extends between the heel end and the toe end.

A non-metallic insert is disposed in at least a portion of the face surface, wherein said non-metallic insert conforms to the loft angle configuration of said face surface. As is described fully with reference to Fig. 4, Fig. 5A and Fig. 5B of the current application, the non-metallic insert compensates for the curved striking surface and helps to send a golf ball in a straight directory, even if the golf ball is not properly struck. The insert acts like a corrective lens and

compensates for the curvature of the striking surface. (See specification, page 15, lines 17-20.)

The insert therefore helps compensate for the loss of striking face continuity caused by the changing loft angle of the striking face.

This claimed configuration is not disclosed or suggested by the cited prior art.

The Stuff patent shows a golf club having a non-metallic insert on its striking face. However, the striking face is flat and only has one consistent loft angle. The Stuff patent does not disclose a putter head with a constantly changing loft angle and a non-metallic insert that compensates for inconsistencies in the ball contact point caused by the constantly changing loft angle.

The Turner patent shows a golf club having three distinct sections on the striking face. Each of the three different sections has a different loft angle that is consistent throughout that section. The golf club shown in the Turner patent is illegal under the USGA rules because the club has more than one distinct striking surface. Again, the Turner patent does not disclose a golf putter head with a constantly changing loft angle and a non-metallic insert that compensates for the constantly changing loft angle.

The MacKeil patent does show a golf club with a constantly changing loft angle.

However, the MacKeil patent makes no disclosure of the use of a non-metallic insert in the club face to help compensate for the inconsistencies in the ball striking point caused by the contoured striking face of the club.

In combination, the Stuff patent, Turner patent and MacKeil patent all fail to disclose any golf club where the loft angle consistently changes along the striking face and has a non-metallic insert that conforms to the uniquely formed striking face. The non-metallic insert helps the claimed putter to strike balls more evenly and direct the balls straighter. Thus, the insert acts like a corrective lens and compensates for the changing curvature of the striking face. Since the

combination of a non-metallic insert on a changing loft face is not shown by the prior art, yet is specifically contained in Claim 1, it is clear that the combination of the Striker, Turner and MacKeil patents fails to disclose the matter contained in Claim 1 or its dependent claims. It is therefore requested to withdraw the 35 USC 103 rejection as they apply to Claim 1 and its dependent claims.

In regard to Claim 5

Claim 5 claims that the non-metallic insert has a varying thickness along a mid-line and varies as a function of position along said mid-line. Nothing in the cited prior art shows a non-metallic insert that varies in thickness as a function of mid-line position. The matter of Claim 5 is therefore clearly distinguishable over the cited prior art patents.

Claim 11

Claim 11 sets forth a putter. The putter has a putter head. The putter head has a face surface with loft angle configuration that continuously varies from the toe end of the face surface to the heel end of the face surface. Furthermore, a non-metallic insert is disposed in at least a portion of the face surface, wherein the non-metallic insert conforms to the loft angle configuration of the face surface. The insert acts like a corrective lens and compensates for the changing curvature of the striking face.

As has been previously mentioned, the Stuff patent, the Turner patent and the MacKeil patent all fail to disclose any golf club with a non-metallic insert where the loft angle of the non-metallic insert consistently changes with the striking face along the length of the striking face. Since this matter is specifically contained in Claim 11, it is clear that the combination of the Striker, Turner and MacKeil patents fails to disclose the matter contained in Claim 11 or its

dependent claims. It is therefore requested to withdraw the 35 USC 103 rejection as they apply to Claim 11 and its dependent claims.

In regard to Claim 16

Claim 16 claims the putter according to Claim 11, wherein said non-metallic insert has a thickness that varies along said mid-line as a function of position on said mid-line.

Nothing in the cited prior art shows a non-metallic insert that varies in thickness as a function of position. The matter of Claim 5 is therefore clearly distinguishable over the cited prior art patents.

U.S. Patent No. 5,098,103 to MacKeil in further view of U.S. Patent No. 5,310,185 to Liollaz and U.S. Patent No. 6,319,150 to Werner.

Claim 10 depends from Claim 1. Claim 15 depends from Claim 11. Claims 20 and 21 depend from Claim 17.

Claim 10

Claim 10 claims the assembly according to Claim 8, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.

Claims 1 is distinguishable over the Turner, Stuff and MacKeil patents for the reasons previously presented. The newly added Viollaz patent and the Werner patent only disclose

various inserts for golf club faces. Neither new reference discloses a golf-club face with a changing loft angle. Accordingly, neither new reference shows a club face with a changing loft angle and a non-metallic insert that conforms to the changing loft angle. Furthermore, it is very clear that these added patents do not disclose, teach or suggest an insert having a front surface of changing loft and a rear surface of different curvatures.

It is therefore requested that the 35 USC 103 rejections be withdrawn as they apply to Claim 10.

Claim 15

Claim 15 claims the assembly according to Claim 11, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.

Claim 11 is distinguishable over the Turner, Stuff and MacKeil patents for the reasons previously presented. The newly added Viollaz patent and the Werner patent only disclose various inserts for golf club faces. Neither new reference discloses a golf-club face with a changing loft angle. Accordingly, neither new reference shows a club face with a changing loft angle and a non-metallic insert that conforms to the changing loft angle. Furthermore, it is very clear that these added patents do not disclose, teach or suggest an insert having a front surface of changing loft and a rear surface of different curvatures.

It is therefore requested that the 35 USC 103 rejections be withdrawn as they apply to Claim 15.

Claim 20-21

Claim 20 and 21 claims the assembly according to Claim 17, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.

Claims 17 is distinguishable over the Turner, Stuff and MacKeil patents for the reasons

previously presented. The newly added Viollaz patent and the Werner patent only disclose various inserts for golf club faces. Neither new reference discloses a golf-club face with a changing loft angle. Accordingly, neither new reference shows a club face with a changing loft angle and a non-metallic insert that conforms to the changing loft angle. Furthermore, it is very clear that these added patents do not disclose, teach or suggest an insert having a front surface of changing loft and a rear surface of different curvatures.

It is therefore requested that the 35 USC 103 rejections be withdrawn as they apply to Claim 20 and 21.

Vhether the Examiner erred in finally rejecting

Claims 1 - 22 under 35 U.S.C. §103

because the Examiner has no proper motivation for the combinations made, thereby producing a wrongful hindsight reconstruction.

The Examiner's rejection based upon the cited references requires a selective combination of various elements before the references can be applied to the pending claims. The law is clear. When prior art references require selective combination to render the claims of an application obvious, there must be some reason for the combination other than hindsight gleaned from the invention itself. See *Interconnect Planning Corp. v. Feil 774 F.2nd 1138, 227 USPQ 543 (Fed Cir 1985), and Ashland Oil, Inc. 776 F.2nd 281, 227 USPQ 657 (Fed Cir 1985).* Something in the prior art as a whole must suggest the desirability and thus the obviousness of making the combination. See *Lindermann Maschinenfabik GmbH v. American Hoist and Derrick Co. 730 F.2nd 1452, 221 USPQ 481 (Fed Cir. 1984), and Uniroyal Inc. v. Rudkin-Wiley Corp. 5 USPQ 2nd 1434 (1988).*

As the court stated in Uniroyal, 837 F. 2nd at 1051, 5 USPQ2nd at 1438, "it is

impermissible to use the claims as a frame and the prior art references as a mosaic to piece

together a facsimile of the claimed invention." In regard to the matter set forth in Claims 1, 11

and 17, the prior art cited simply does not disclose any golf club face with a constantly changing

loft angle and a non-metallic insert that in some manner compensates for the loss in performance

caused by the curved club face. Since nothing in the cited art suggests what was claimed, the

Examiner's combination is without motivation and is wrongful hindsight reconstruction.

CONCLUSION

The Applicant's brief is believed to be in full compliance with 37 C.F.R. §1. 192(c) et

seq. The Examiner's 35 U.S.C. §103 rejections are not supported by the cited references. The

Board is therefore requested to cause the Examiner to remove the rejection and allow the

remaining pending claims.

Respectfully Submitted,

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VIL APPENDIX.

The pending claims stand as follows:

1. A putter head assembly, comprising:

a putter body having a toe end, a heel end and a face surface that extends from said heel end toward said toe end, wherein said face surface has a loft angle configuration that continuously varies from a positive loft angle to a negative loft angle as said face surface extends from said heel end toward said toe end;

a non-metallic insert disposed in at least a portion of said face surface, wherein said non-metallic insert conforms to the loft angle configuration of said face surface.

- 2. The assembly according to Claim 1, wherein said face surface has a mid-line that extends along the center of said face surface between said heel end and said toe end.
- 4. The assembly according to Claim 2, wherein said mid-line of said face surface follows a curve having a radius of curvature between 54 inches and 90 inches.
- 5. The assembly according to Claim 2, wherein said non-metallic insert has a varying thickness along said mid-line and varies as a function of position along said mid-line.
- 7. The assembly according to Claim 1, wherein said positive loft angle is ten degrees.
- 8. The assembly according to Claim 3, wherein said non-metallic insert has a front surface and an opposite rear surface wherein said front surface conforms to said loft angle

configuration.

10. The assembly according to Claim 8, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.

11. A putter, comprising:

- a shaft having a first end and a second end;
- a handle grip coupled to said first end of said shaft;
- a putter head coupled to said second end of said shaft, said putter head including a face surface having a toe end and a heel end, said face surface being symmetrically disposed around an imaginary mid-line that extends from said toe end to said heel end, wherein said face has a loft angle configuration that continuously varies between said toe end and said heel end;

a non-metallic insert disposed in at least a portion of said face surface, wherein said non-metallic insert conforms to the loft angle configuration of said face surface.

- 12. The putter according to Claim 11, wherein said mid-line follows a curve having a radius of curvature between 54 inches and 90 inches.
- 13. The putter according to Claim 11, wherein said non-metallic insert has a front surface and an opposite rear surface, wherein said front surface conforms to said loft angle configuration.
- 15. The putter according to Claim 13, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.

16. The putter according to Claim 11, wherein said non-metallic insert has a thickness that varies along said mid-line as a function of position on said mid-line.

17. A golf club striking surface comprising:

a contact face having a first end, a second end and an imaginary mid-line that runs down the center of said contact face between said first end and said second end, wherein said mid-line follows a curved path, having a predetermined radius of curvature, and said contact face has a loft angle configuration that continuously varies between said first end and said second end;

an insert disposed within said contact face, wherein said non-metallic insert has a thickness along said mid-line that varies as a function of position on said mid-line.

- 18. The striking surface according to Claim 17, wherein said insert has a front surface and an opposite rear surface, wherein said front surface conforms to said contact face.
- 20. The striking surface according to Claim 18, wherein said rear surface has a plurality of sections and each of said sections has its own radius of curvature.
- 21. The striking surface according to Claim 18, wherein said rear surface follows different curves in different sections, wherein each of said curves has a different origin of curvature.
- 22. The striking surface according to Claim 17, wherein said insert is fabricated from an elastomeric material having a "A" Shore value of between 90 and 95.